UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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FEB 16 2016

Ref: 8EPR-N

Tami Paulsen, Team Leader
Missoula Ranger District
Lolo National Forest
24 Fort Missoula Road
Missoula, Montana 59804

Re: Center Horse Landscape Restoration Project Draft Environmental Impact Statement: CEQ# 20150363

Dear Ms. Paulsen:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service's Draft Environmental Impact Statement (EIS) for the Center Horse Landscape Restoration Project in the Lolo National Forest. In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA), the EPA has reviewed and rated this Draft EIS.

Project Background

The Center Horse Landscape Restoration project area encompasses approximately 61,300 acres in the Lolo National Forest, located approximately 14 miles north of Ovando, MT. Due to changes in forest species composition and structure as a result of past fire suppression and timber harvest, this project aims to: 1) improve/restore forest composition, spatial arrangement and structure, 2) restore fire adapted ecosystems, 3) improve water quality, restore or enhance fish and wildlife habitat, and conserve and improve soil resources, and 4) right size the existing transportation network to meet public and administrative needs while at the same time eliminating unneeded roads and trails. The area to be treated is approximately 9,164 acres (reduced from approx. 16,545 after scoping), and treatment activities include vegetative management, road treatments, watershed improvements and soil restoration.

Alternatives

The Draft EIS analyzes a no action alternative (Alternative A), as well as two action alternatives (Alternatives B and C). Alternative B is the Forest Service's Proposed Action. Vegetative treatments on approximately 9,164 acres under Alternative B are proposed to: (1) improve the maintenance, establishment, or enhancement of "species-at-risk" (western larch, ponderosa pine and whitebark pine), (2) reduce bark beetle infestation (or risk thereof) of douglas fir, lodgepole pine and ponderosa pine, (3) provide for resilience to natural disturbances and related benefits to snag-dependent wildlife, and (4) reduce ladder fuels and crown fire potential. Prescribed fire on approximately 9,129 of these acres would be preceded by:

- improvement cutting or thinning on approx. 859 acres;
- small tree thinning on approx. 1,225 acres;

- biomass/small tree thinning on approx. 2,115 acres;
- variable retention harvest on approx. 1,214 acres;
- regeneration harvesting on approx. 40 acres; and
- slashing on approx. 3,676 acres.

Alternative C was developed to respond to public comments expressing concern about the impacts of commercial harvest and temporary roads, and therefore eliminates all commercial harvest activities and construction of temporary roads and stream crossings, and reduces the number of acres to be treated with prescribed fire. Vegetative treatments would occur on approximately 7,016 acres, with prescribed fire being preceded by:

- small tree thinning on approx. 3,340 acres; and
- slashing on approx. 3,676 acres.

The 2,148 acres on which treatments would not occur under Alternative C would result in less temporary soil disturbance and sediment load to nearby streams, but these acres would also not benefit from the increased ecological resilience to wildfire and bark beetle infestation, nor the improved habitat for snag-dependent wildlife, that is provided by the commercial treatments. Both Alternative B and Alternative C would retain large trees and old growth stands within the project area. Both alternatives would also include identical road treatments (e.g., decommissioning of 157 miles of roads), stream channel treatments (e.g., removal of 13 perennial or fish barrier culverts) and soil rehabilitation treatments (e.g., rehabilitation of nine existing landings and 253 acres of tree/shrub planting.)

Recommendations for Consideration

The EPA appreciates the Forest Service's efforts to consider in depth the direct, indirect and cumulative environmental impacts of the Center Horse Landscape Restoration project. The level of analysis of multiple resource concerns is impressive, and we support the Forest Service's goal of restoring the forest ecosystem that has been altered by past fire suppression and timber harvest, as well as the determination that this project will provide substantial and important benefits to the ecosystem of the Center Horse project area. For example, we support road and culvert removals that will result in reduced sediment runoff and improved stream habitat. We have several recommendations that will hopefully increase the understanding and value of the Forest Service's plans.

The Draft EIS analyzed potential impacts to drinking water sources in the inventoried roadless areas within the project area, and we recommend considering current and/or future sources of drinking water throughout the project area, not only in the roadless areas.

In such a large and detailed planning document as an EIS, clarity is important. There are many abbreviations used throughout the Draft EIS. To help improve clarity and understanding, we suggest that the Final EIS include: (1) a list of abbreviations towards the beginning of the document, and (2) figure legends that include abbreviations and other key information such as units of measure. There are also some instances where it is not clear where sources of information or data are located. Specifically, supporting on-line reports that are referenced in the Draft EIS are missing files or other sources of information. For instance, we cannot locate Soil File 1 and Soil File 2 in the Soil Specialist's Report. As another example, on page 230 of the Draft EIS, in reference to the Southwest Crown of the Continent's forest carnivore monitoring effort, it is stated that maps of detailed survey effort within the Center Horse areas can be found in Appendix A to the Wildlife Specialist's Report. However, Appendix A of this

report contains Grizzly Bear Moving Windows Information and Tables. Some of the information currently not readily available may be useful to the public in their understanding of cause-and-effect relationships associated with the proposed action; therefore, we suggest that the Forest Service review what data and information should be made available in the Final EIS or on the Forest Service's website and clarify these details in the Final EIS. In addition, we have not been able to access the website, fs.usda.gov/goto/lolo/projects, referenced at several locations within the document.

Climate Change

We appreciate the Forest Service's consideration of the effects that climate change is expected to have on the forest ecosystem of the Center Horse project area, and how prescribed burning management activities should help improve resilience of the project area to those effects. We recommend that the Forest Service use the Council on Environmental Quality's (CEQ) December 2014 revised draft guidance for federal agencies' consideration of greenhouse gas (GHG) emissions and climate change impacts to help outline a framework for further analysis of relevant climate change issues. Accordingly, we recommend that the Final EIS include: (1) an estimate of the GHG emissions associated with the project; (2) qualitative descriptions of relevant climate change impacts, including extreme climate-related events, to each of the resources that will be subject to restoration actions; and (3) practicable resource protection and mitigation measures to reduce project-related GHG emissions and improve resiliency to, and mitigation of, climate change. We also suggest the Final EIS include a discussion of how the Forest Service intends to monitor for effects of climate change on forest resources.

Affected Environment

Forested landscapes help to mitigate the greenhouse gas emissions that contribute to climate change. We recommend that the Final EIS describe the climate protection provided by the forest ecosystem of the Center Horse project area, as well as the potential changes in the affected environment that may result from climate change. Examples of the latter include the expected impacts of climate change on bark beetle survival, virulence, and distribution; and defining preferred and acceptable species that are not currently standard in project area stands but potentially are in the "forest of the future" (e.g., subalpine fir.)

Environmental Consequences

Restoration treatments may enhance the carbon sequestration potential of forests by promoting forest health, vigor, and carbon uptake capacity, and by maintaining carbon stores in large, old trees. The EPA recommends that these and other considerations and recommendations related to climate change mitigation be identified and included in the Final EIS. We also recommend that the Final EIS alternatives analysis consider, as appropriate, practicable measures or changes to the alternatives to make them more resilient to anticipated climate change. For example, it may be useful to forecast the impacts of climate change on species' release potential and stand development following silvicultural treatments, and consider how management decisions could be altered in light of it. We suggest that the Forest Service consider climate adaptation measures based on how future climate scenarios may impact the project. The National Climate Assessment (NCA), released by the U.S. Global Change Resource Program (http://nca2014.globalchange.gov), contains scenarios for regions and sectors, including forests. Using NCA or other peer-reviewed climate scenarios to inform alternatives analysis and possible changes to the proposal can improve resilience and preparedness for climate change. Including future

climate scenarios in the EIS would also help decision makers and the public consider whether the environmental impacts of the alternatives would be exacerbated by climate change and if additional mitigation measures may be warranted.

If the Final EIS includes an estimate of the project's GHG emissions, the EPA does not recommend comparing GHG emissions from the proposed action to global emissions. As noted by the CEQ revised guidance, "this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impact." The EPA also recommends that the lead agencies do not compare GHG emissions to total U.S. emissions, as this approach does not provide meaningful information for a project-level analysis. Consider providing a frame of reference, such as an applicable federal, state, tribal or local goal for GHG emissions reductions, and discuss whether the emissions levels are consistent with such goals.

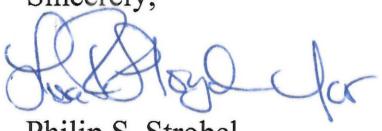
Conclusion and Rating

Pursuant to EPA policy and guidance, the EPA rates the environmental impact of federal agency actions and adequacy of the NEPA analysis. The EPA rates the Forest Service's Proposed Action, Alternative B, as "LO" (Lack of Objections). This LO rating means that the review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. A full description of the EPA's rating system can be found at: http://www2.epa.gov/nepa/environmental-impact-statement-rating-system-criteria.

Closing

We appreciate the opportunity to review this project and hope our recommendations help the Forest Service when finalizing the EIS. If you have any questions, please contact me at 303-312-6704, or Dr. Melissa McCoy of my staff at 303-312-6155 or mccoy.melissa@epa.gov.

Sincerely,



Philip S. Strobel
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